

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A bending apparatus for bending at least one glass sheet placed on a bending mold into a desired shape by heating in a furnace, which comprises a bending mold for placing at least one glass sheet thereon, a tunnel-like heating furnace through which the bending mold is conveyed, a first group of a plurality of heating elements fixed on an inner wall of the heating furnace, and a radiation-heating device having a second group of a plurality of heating elements placed separably from the inner wall surface of the heating furnace,

wherein said second group of a plurality of heating elements of said radiation-heating device are mounted on a structure that may be moved to increase or decrease the distance between said second group of a plurality of heating elements and said glass sheet,

wherein said second group of a plurality of heating elements of said radiation-heating device are disposed along the center line of said glass sheet or are disposed two-dimensionally, and

wherein the temperature of each heating element of said second group of a plurality of heating elements may be individually controlled.

2. (Original) The bending apparatus for at least one glass sheet according to Claim 1, wherein the second group of heating elements radiation-heat locally at least one glass sheet at a predetermined position to provide a predetermined temperature distribution on the glass sheet.

3. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 1, wherein the second group of heating elements are suspended from a ceiling inner wall of the heating furnace at a position opposed to the upper surface of the glass sheet.

4. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 1, wherein a distance between the second group of heating elements and the inner wall surface of the heating furnace is variable.

5. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 1, wherein each heating element of the second group of heating elements has a heater wire and an equally heating plate provided at the heating face side of the heater wire.

6. (Withdrawn; Currently Amended) A method of bending at least one glass sheet into a desired shape, which comprises placing at least one glass sheet on a bending mold, introducing the glass sheet placed on the bending mold into a heating furnace having a tunnel-shaped inside, and heating the glass sheet by two types of heating means of a first group of a plurality of heating elements fixed on an inner wall surface of the heating furnace and a second group of a plurality of heating elements placed separably from the inner wall surface of the heating furnace,

wherein said second group of a plurality of heating elements of said radiation-heating device are mounted on a structure that may be moved to increase or decrease the distance between said second group of a plurality of heating elements and said glass sheet,

wherein said second group of a plurality of heating elements of said radiation-heating device are disposed along the center line of said glass sheet or are disposed two-dimensionally, and

wherein the temperature of each heating element of said second group of a plurality of heating elements may be individually controlled.

7. (Withdrawn) The method of bending at least one glass sheet according to Claim 6, wherein the second group of heating elements radiation-heat locally at least one glass sheet to provide a predetermined temperature distribution on the glass sheet.

8. (Withdrawn) The method of bending at least one glass sheet according to Claim 6, wherein the second group of heating elements are suspended from a ceiling inner wall of the heating furnace and disposed at a position opposed to the upper surface of the glass sheet to provide a predetermined temperature distribution on the glass sheet.

9. (Withdrawn) The method of bending at least one glass sheet according to Claim 6, wherein a distance between the second group of heating elements and the inner wall surface of the heating furnace is variable to provide a predetermined temperature distribution on the glass sheet.

10. (Withdrawn) The method of bending at least one glass sheet according to Claim 6, wherein the bending mold having the glass sheet placed thereon is intermittently conveyed so as to stop at each section in the heating furnace.

11. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 2, wherein the second group of heating elements are suspended from a ceiling inner wall of the heating furnace at a position opposed to the upper surface of the glass sheet.

12. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 2, wherein a distance between the second group of heating elements and the inner wall surface of the heating furnace is variable.

13. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 2, wherein each heating element of the second group of heating elements has a heater wire and an equally heating plate provided at the heating face side of the heater wire.

14. (Withdrawn) The method of bending at least one glass sheet according to Claim 7, wherein the second group of heating elements are suspended from a ceiling inner wall of the heating furnace and disposed at a position opposed to the upper surface of the glass sheet to provide a predetermined temperature distribution on the glass sheet.

15. (Withdrawn) The method of bending at least one glass sheet according to Claim 7, wherein a distance between the second group of heating elements and the inner wall surface

of the heating furnace is variable to provide a predetermined temperature distribution on the glass sheet.

16. (Withdrawn) The method of bending at least one glass sheet according to Claim 7, wherein the bending mold having the glass sheet placed thereon is intermittently conveyed so as to stop at each section in the heating furnace.

17. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 3, wherein a distance between the second group of heating elements and the inner wall surface of the heating furnace is variable.

18. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 3, wherein each heating element of the second group of heating elements has a heater wire and an equally heating plate provided at the heating face side of the heater wire.

19. (Withdrawn) The method of bending at least one glass sheet according to Claim 8, wherein a distance between the second group of heating elements and the inner wall surface of the heating furnace is variable to provide a predetermined temperature distribution on the glass sheet.

20. (Withdrawn) The method of bending at least one glass sheet according to Claim 8, wherein the bending mold having the glass sheet placed thereon is intermittently conveyed so as to stop at each section in the heating furnace.

21. (Previously Presented) The bending apparatus for at least one glass sheet according to Claim 4, wherein each heating element of the second group of heating elements has a heater wire and an equally heating plate provided at the heating face side of the heater wire.

22. (Withdrawn) The method of bending at least one glass sheet according to Claim 9, wherein the bending mold having the glass sheet placed thereon is intermittently conveyed so as to stop at each section in the heating furnace.

23. (New) The bending apparatus for at least one glass sheet according to Claim 1, wherein said second group of a plurality of heating elements of said radiation-heating device are disposed along the center line of said glass sheet.

24. (New) The bending apparatus for at least one glass sheet according to Claim 1, wherein said second group of a plurality of heating elements of said radiation-heating device are disposed two-dimensionally.

25. (New) The method of bending at least one glass sheet according to Claim 6,
wherein said second group of a plurality of heating elements of said radiation-heating device
are disposed along the center line of said glass sheet.

26. (New) The method of bending at least one glass sheet according to Claim 6,
wherein said second group of a plurality of heating elements of said radiation-heating device
are disposed two-dimensionally.

SUPPORT FOR THE AMENDMENTS

Claims 1 and 6 have been amended.

Claims 23-26 have been added.

The amendment of Claims 1 and 6, as well as new Claims 23-26, are supported by the specification and figures as filed. For example, support is offered at page 6, line 15 to page 9, line 26, page 13, line 6 to page 15, line 18, as well as Figures 2-4, 6, and 8.

No new matter has been added by the present amendment.